



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Wade Mattar, et al Art Unit: Unknown Serial No.: 10/773,459 Examiner: Unknown

Filed: February 9, 2004

Title : MULTIPHASE CORIOLIS FLOWMETER

## MAIL STOP AMENDMENT

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

## INFORMATION DISCLOSURE STATEMENT

Applicants request consideration of the references listed on the attached PTO-1449 form. Under 37 C.F.R. § 1.98 (a)(2)(ii), only copies of foreign patent documents and/or non-patent literature are enclosed. Copies of any listed U.S. patents or U.S. patent application publications can be provided upon request.

This statement is being filed within three months of the filing date of the application or before the receipt of a first Office Action on the merits. Please apply any charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

Date: tebruny 23, 2005

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Substitute Form PTO-1400 U.S.

partment of Commerce ent and Trademark Office Attorney's Docket No. 12780-027001

Application No. 10/773,459

**Information Disclosure Statement** 

by Applicant (Use several sheets if necessary)

FEB 23 2005

Wade Mattar, et al

February 9, 2004

Filing Date

**Applicant** 

Group Art Unit

(37 CFR §1.98(b))

	_		U.S. Pate	ent Documents			
Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
	AA	Re29383	Sep., 1977	Gallatin et al.			
	AB	Re31450	Nov., 1983	Smith			
	AC	3956682	May., 1976	Van Dyck			
	AD	4358822	Nov., 1982	Sanchez			
	AE	4419898	Dec., 1983	Zanker et al.			
	AF	4422338	Dec., 1983	Smith			
	AG	4491025	Jan., 1985	Smith et al.			
	AH	4688418	Aug., 1987	Cheung et al.			
	AI	4727746	Mar., 1988	Mikasa et al			
,	AJ	4757390	Jul., 1988	Mehrgardt et al.			
	AK	4773257	Sep., 1988	Aslesen et al.			
	AL	4782711	Nov., 1988	Pratt			
	AM	4801897	Jan., 1989	Flecken			
	AN	4817448	Apr., 1989	Hargarten et al.			
	AO	4823614	Apr., 1989	Dahlin			
	AP	4852395	Aug., 1989	Kolpak			
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	AR	4879911	Nov., 1989	Zolock			
	AS	4891991	Jan., 1990	Mattar et al.		7-1-	
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	AV	4911020	Mar., 1990	Thompson			
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	AY	4996871	Mar., 1991	Romano			
	AZ	5027662	Jul., 1991	Titlow et al.			
. 7	AAA	5029482	Jul., 1991	Liu et al.			

Date Considered

EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Substitute Form PTO-1449
(Modified)

U.S. Department of Commerce Patent and Trademark Office

Information Disclosure Statement by Applicant
(Use several sheets if necessary)

U.S. Department of Commerce Patent and Trademark Office

Attorney's Docket No. 12780-027001

Application No. 10/773,459

Applicant
Wade Mattar, et al

Filing Date

Group Art Unit

(37 CFR §1.98(b))

Filing Date Group Art Unit
February 9, 2004

			U.S. Pate	nt Documents			
Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
	ABB	5050439	Sep., 1991	Thompson			
	ACC	5052231	Oct., 1991	Christ et al.		-	
	ADD	5054313	Oct., 1991	Fitzgerald et al.			
	AEE	5054326	Oct., 1991	Mattar			
	AFF	5218869	Jun., 1993	Pummer			
	AGG	5228327	Jul., 1993	Bruck			
	АНН	5259250	Nov., 1993	Kolpak			
	AII	5271281	Dec., 1993	Mattar et al.			
	AJJ	5295084	Mar., 1994	Arunachalam et al.			
	AKK	5301557	Apr., 1994	Cage et al.			
	ALL	5343764	Sep., 1994	Mattar et al.			
	AMM	5347874	Sep., 1994	Kalotay et al.		""	
	ANN	5400653	Mar., 1995	Kalotay			
	AOO	5429002	Jul., 1995	Coleman			
	APP	5469748	Nov., 1995	Kalotay			
	AQQ	5497665	Mar., 1996	Cage et al.			
_	ARR	5497666	Mar., 1996	Patten et al.			
	ASS	5535632	Jul., 1996	Kolpak			
	ATT	5555190	Sep., 1996	Derby et al.			
	AUU	5570300	Oct., 1996	Henry et al.			
	AVV	5578764	Nov., 1996	Yokoi et al.			
	AWW	5594180	Jan., 1997	Carpenter et al.			
	AXX	5648616	Jul., 1997	Keel			
	AYY	5654502	Aug., 1997	Dutton			
	AZZ	5687100	Nov., 1997	Buttler et al.			
	AAAA	5732193	Mar., 1998	Aberson		- "	
	ABBB	5734112	Sep., 1996	Bose et al.			

Examiner Signature	Date Considered	
<b>9</b>		

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Substitute Form PTO-1449 (Modified)	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 12780-027001	Application No. 10/773,459	
	closure Statement oplicant	Applicant Wade Mattar, et al		
(Use several sheets if necessary) (37 CFR \$1.98(b))		Filing Date February 9, 2004	Group Art Unit	

			U.S. Pate	nt Documents	,		
Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
	ACCC	5774378	Jun., 1998	Yang			
	ADDD	5804741	Sep., 1998	Freeman			
	AEEE	5877954	Mar., 1999	Kimasauskas et al.			
1	AFFF	5926096	Jul., 1999	Mattar et al.			
	AGGG	5969264	Oct., 1999	Rivkin			
	АННН	6073495	Jun., 2000	Stadler			
	AIII	6092429	Jul., 2000	Cunningham et al.			
	AJJJ	6185470	Feb., 2001	Pado et al.			
	AKKK	6309342	Oct., 2001	Blazey et al.			
	ALLL	6301973	Oct., 2001	Smith			
	AMMM	6311136	Oct., 2001	Henry et al.			
-	ANNN	6318156	Nov., 2001	Dutton et al.			
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	APPP	6327914	Dec., 2001	Dutton			
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	ARRR	2002/0038186	Mar., 2002	Henry et al.			
	ASSS	2002/0133307	Sep., 2002	Maginnis			
	ATTT	6505131	Jan., 2003	Henrot			
	AUUU	6505519	Jan., 2003	Henry et al.			
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	AWWW	6551251	Apr., 2003	Zuckerwar et al.			
	AXXX	6564619	May., 2003	Dutton et al.	-		

	Foreign Patent Documents or Published Foreign Patent Applications							
Examiner	Desig.	Document	Publication	Country or		-	Trans	slation
Initial	ID	Number	Date	Patent Office	Class	Subclass	Yes	No
	AYYY	WO 93/21505	Oct., 1993	WIPO				
	AZZZ	0 696 726 A	Feb., 1996	ЕРО				

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	Foreig	n Patent Doo	uments or F	ublished Foreign	Patent A	Application	าร	
Examiner	Desig.	Document	Publication	Country or			Translation	
Initial	ID	Number	Date	Patent Office	Class	Subclass	Yes	No
	AAAAA	0 698 783	Feb., 1996	EPO				
	ABBBB	0 702 212	Mar., 1996	EPO				
	ACCCC	0 827 096	Mar., 1998	EPO				
	ADDDD	WO 00/10059	Feb., 2000	WIPO				
	AEEEE	WO 02/08703	Jan., 2002	WIPO				

	Other D	ocuments (include Author, Title, Date, and Place of Publication)
Examiner Initial	Desig. ID	Document
	AFFFF	DeCarlo, Joseph; "True Mass-Flow Measurement"; Fundamentals of Flow Measurement, Unit 11-2; pp. 208-220; 1984
	AGGGG	Grumski, J.T., et al., "Performance of a Coriolis-type Mass Flow Meter in the Measurement of Two- phase (air-liquid) Mixtures", ASME Fluid Engineering Division Publication FED, vol. 17, pp 75-84, 1984
	АННН	J. Hemp et al.; "On the Theory and Performance of Coriolis Mass Flowmeters"; Proceedings of the International Conference on Mass Flow Measurement Direct and Indirect; IBC Technical Services; 40 pages; London, February 1989
	AIIII	Liu, R.P., et al., "A Neural Network to Correct Mass Flow Errors Caused by Two Phase Flow in a Digital Coriolis Mass Flow Meter". Engineering Science Department, Oxford University
	AJJJJ	Luntta, E., et al., "Neural Network Approach to Ultrasonic Flow Measurements", Flow Measurement and Instrumentation, vol. 10, pp 35-43, 1999
	AKKKK	Reimann, J., "Developments in Two-Phase Mass Flow Rate Instrumentation", pp 339-402
	ALLLL	Skea, A.F., "Effects of Gas Leaks in Oil Flow on Single-Phase Flowmeters", Flow Measurement and Instrumentation, vol. 10, pp 146-150 (1999)
	AMMMM	Spitzer, David A., "Mass Flowmeters," Industries Flow Measurement, Chapter 12, pp. 197-210, 1990
	ANNNN	Wood, et al., "A Phase-Locked Loop for Driving Vibrating Tube Densimeters," Rev. Sci. Instrum., vol. 60, no. 3, March 1989, pp. 493-494

Examiner Signature	Date Considered